

Date: Mon, 13 Dec 93 15:40:41 PST
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #1459
To: Info-Hams

Info-Hams Digest Mon, 13 Dec 93 Volume 93 : Issue 1459

Today's Topics:

 6-m Transverters
 ANS-345 BULLETINS
 Daily Summary of Solar Geophysical Activity for 10 December
 Daily Summary of Solar Geophysical Activity for 11 December
 Pie-on-face re: Hypochondriac
 Scratchi, January, 1960

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 13 Dec 93 14:11:57 GMT
From: ogicse!emory!kd4nc!ke4zv!gary@network.ucsd.edu
Subject: 6-m Transverters
To: info-hams@ucsd.edu

In article <CHu4o7.407@srngenprp.sr.hp.com> alanb@sr.hp.com (Alan Bloom) writes:
>Robert Carpenter (rc@cmr.ncsl.NIst.GOV) wrote:

>
>: Some of the older xverters, such as the Hallicrafters HA-6, were all-tube and
>: put out close to 100 watts. Their receive side wasn't great, being a
>: 6CW4 Nuvistor (intermod) for rf amplifier.

>
>I always thought that superior strong-signal handling capability was one
>of the ADVANTAGES of a tube-type front end. One disadvantage of a 6CW4 is
>a noise figure worse than you can get with modern solid-state devices.
>This is a problem on 2 meters, but not a concern on 6, where atmospheric
>noise levels are higher.

The tube *should* have less intermod, but if the static operating conditions aren't right, it can have severe intermod. A usual cause is too low a plate voltage, and/or too low a standing current.

Gary

--

Gary Coffman KE4ZV	I kill you,	gatech!wa4mei!ke4zv!gary
Destructive Testing Systems	You kill me,	uunet!rsiatl!ke4zv!gary
534 Shannon Way	We're the Manson Family	emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244	-sorry Barney	

Date: 13 Dec 93 00:19:59 GMT
From: news-mail-gateway@ucsd.edu
Subject: ANS-345 BULLETINS
To: info-hams@ucsd.edu

SB SAT @ AMSAT \$ANS-345.01
AO-13 FACES LONG ECLIPSE PERIODS

HR AMSAT NEWS SERVICE BULLETIN 345.01 FROM AMSAT HQ
SILVER SPRING, MD DECEMBER 11, 1993
TO ALL RADIO AMATEURS BT
BID: \$ANS-345.01

AO-13 Experiences Long Solar Eclipse Which Affect Transponder Operations
James Miller (G3RUH) of the AO-13 Command Team reports that because of the long duration of the solar eclipse periods that AO-13 is experiencing, they have been forced to severely curtail transponder operations. Some of the eclipse periods have been as long as 2 hours. Battery bus voltage has become so low that the net affect has been that there has been no battery charging from orbit to orbit. The safety threshold on the battery bus voltage is currently set 12.6 volts. When the bus voltage drops below 12.6 volts, the on-board computer shuts down the beacon and brings all the other subsystems on AO-13 to a "low-power" state. Currently, with the transponders and telemetry beacons turned-off, the total current consumption on AO-13 is around 1 ampere. In attempt to remedy this low battery voltage problem, the Command Team has made an spacecraft attitude re-adjustment to Bahn Longitude 245 degrees and a Bahn Latitude of -5 degrees. But under the current solar eclipse circumstances, even this has not been sufficient to solve the problem of low battery voltage. So it was necessary to take even further steps including turning off all transponder operations on AO-13 until between Friday December 10 and Monday December 13, 13-DEC-93 around 03:28 UTC. It is hoped that this will bring AO-13 through this difficult time period, however, there is no guarantee that the above

actions will be enough. It should be noted that AO-13's batteries are now 5 years old and the Command Team feels that it may be necessary to take a close look at the battery charging software and presets to determine if they need to be adjusted for the age of the batteries.

It is requested that all AO-13 users keep a close "ear" to the telemetry beacons which can be heard on a downlink frequency 145.812 MHz or 2400.646 MHz for the latest information on the transponder schedule.

The Command Team is always interested in hearing from the user any "constructive feedback" about AO-13 transponder operations.

The AO-13 Command Team currently consists of the following:

Peter DB2OS @ DB0FAU
James G3RUH @ GB7DDX
Graham VK5AGR @ VK5WI

[The AMSAT News Service (ANS) would like to thank G3RUH for the information which went into this bulletin item.]

/EX

SB SAT @ AMSAT \$ANS-345.02
IO-26 SUFFERS OBC CRASH

HR AMSAT NEWS SERVICE BULLETIN 345.02 FROM AMSAT HQ
SILVER SPRING, MD DECEMBER 11, 1993
TO ALL RADIO AMATEURS BT
BID: \$ANS-345.02

IK2OVV Explains the IO-26 On-Board-Computer (OBC) Crash

After 45 days of uninterrupted BBS service on IO-26, on 8-DEC-93 at approximately 11:30 UTC, ITAMSAT IO-26 suffered a crash during a pass over Europe. IO-26 is now in an undefined status, with its transmitter on but no MBL telemetry; the Command Team will try to regain control of the satellite in the next passes over Europe. The cause of the crash is still unclear; the Command Team is investigating on some new software used to access the BBS services. In the past, some other MICROSATs crashes were due to bugs found in the user software. ITAMSAT Command Team, while recommending users not to uplink to the satellite at this time, would like to receive reports about IO-26, especially regarding the presence of just the HDLC flags on the downlink or some sort of telemetry, either MBL or PHT style. However, after examining the memory dumps taken from IO-26, Alberto Zagni (I2KBD) and Harold Price (NK6K) have decided to begin the uploading of the high-level software to restore IHT (ITAMSAT Housekeeping Task) capability. The cause of the crash is still unknown; I2KBD and NK6K are working on the memory dumps, but the crash destroyed part of the internal logs kept

by the high-level software. Since the crash happened as one of the Ground Command Stations in Milan was uplinking to the satellite using a new ground software (which has not yet been fully tested), there is chance that this was the cause of the crash. The ITAMSAT Command Team has decided not to turn the BBS on after the reloading of the software; the Team will start some Whole Orbit Data (WOD) collection in order to fully optimize the energy budget onboard the satellite. This will enable IO-26 to have higher power settings on the downlink. It is estimated that the high-level software will be working by this soon; stay tuned on the downlink for any news!

The ITAMSAT Command Team would like to thank again Harold Price (NK6K) for the great help in debugging the memory dumps and the Eyesat Command Team for helping during the initial recovery.

ITAMSAT Command Team can be reached via Internet as i2kbd@amsat.org or ik2ovv@amsat.org, and on Compuserve HAMNET.

73 de Luca Bertagnolio IK2OVV
ITAMSAT Command Team

/EX

SB SAT @ AMSAT \$ANS-345.03
AMSAT OPS NET SCHEDULE

HR AMSAT NEWS SERVICE BULLETIN 345.03 FROM AMSAT HQ
SILVER SPRING, MD DECEMBER 11, 1993
TO ALL RADIO AMATEURS BT
BID: \$ANS-345.03

Current AMSAT Operations Net Schedule For AO-13

AMSAT Operations Nets are planned for the following times. Mode-B Nets are conducted on AO-13 on a downlink frequency of 145.950 MHz. If, at the start of the OPS Net, the frequency of 145.950 MHz is being used for a QS0, OPS Net enthusiasts are asked to move to the alternate frequency of 145.955 MHz.

Date	UTC	Mode	Phs	NCS	Alt NCS
3-Jan-94	0200	B	160	WA5ZIB	N7NQM

Any stations with information on current events would be most welcomed. Also, those interested in discussing technical issues or who have questions about any particular aspect of OSCAR statellite operations, are encouraged to join the OPS Nets. In the unlikely event that either the Net Control Station (NCS) or the alternate NCS do not call on frequency, any participant is invited to act as the NCS.

Slow Scan Television on AO-13

SSTV sessions will be held on immediately after the OPS Nets a downlink on a Mode-B downlink frequency 145.960 MHz.

/EX

SB SAT @ AMSAT \$ANS-345.04

WEEKLY OSCAR STATUS REPORTS

HR AMSAT NEWS SERVICE BULLETIN 345.04 FROM AMSAT HQ
SILVER SPRING, MD DECEMBER 11, 1993
TO ALL RADIO AMATEURS BT
BID: \$ANS-345.04

Weekly OSCAR Status Reports: 11-DEC-93

AO-13: Current Transponder Operating Schedule:

L QST *** AO-13 TRANSPONDER SCHEDULE *** 1993 Nov 15-Jan 31
Mode-B : MA 0 to MA 95 ! / Eclipses, max
Mode-B : MA 95 to MA 180 ! OFF Dec 07 - 24. < duration 136
Mode-B : MA 180 to MA 218 ! \ minutes.
Mode-S : MA 218 to MA 220 !<- S beacon only
Mode-S : MA 220 to MA 230 !<- S transponder; B trsp. is OFF
Mode-BS : MA 230 to MA 256 ! Blon/Blat 240/-5
Omnis : MA 250 to MA 150 ! Move to attitude 180/0, Jan 31
[G3RUH/DB20S/VK5AGR]

F0-20: The following is the F0-20 operating schedule:

Analog mode: 15-Dec-93 07:41 -to- 22-Dec-93 8:05 UTC
Digital mode: otherwise noted above. [JJ1WTK]

IO-26: ITAMSAT suffered a system crash after 45 days of flawless operations. The command team is gathering data to try to determine the source of the problem. They state that the transmitter is on, but the BBS is not open.

AO-16: Operations are normal. [WH6I]

LO-19: Operations are normal. [WH6I]

KO-23: Functioning normally. There have been some questions regarding image files. When WH6I see some images on KITSAT, he tries to list them, but files on that satellite are only active for maybe 5-6 days depending on how much new material is uploaded. Therefore, by the time this status report makes it to the ANS status report,

the files may be gone. Satellite image files on KITSAT have names in the form KAI?xxxx where ? is either W or N to indicate a WIDE or NARROW view image. The "xxxx" is a serial number. These files are about 350Kbytes large and can be seen in the directory in PB by hitting F4 to see the list of files generated by the satellite. They are usually in pairs with a wide and narrow view file. These files are downloaded just like anyother file. The program DISPLAY which is often up on the birds willdisplay these images, and it will display whatever there is in the xxxx.ACT file of the image, so that you can look at a partial download and decide if it is worth pursuing. [WH6I]

RS-10: After a period of inactivity, the RS-10 QSO robot is QRV again. The downlink is approx 29.403 MHz, and uplink is +/- 145.820 MHz. If you are "into" the robot receiver, your CW from the few KHz wide passband will be retransmitted on the robot's fixed frequency. The speed of your CW response is not important; it just needs to be steadily and cleanly sent. K0BJ notes that he just changed from a vertical dipole to a J-pole. It seems so far to be about as bad with QSB as the dipole, but the J-pole did seem to peak more in the longer, low-elevation parts of the pass. The next experiment K0BJ will perform is with a turnstile antenna.

POSAT: CT1ENQ would like to inform that the Portuguese satellite (POSAT) is now prepared for amateur radio use. Please contact Portuguese AMSAT group, AMSAT-PO, for more information.

The AMSAT NEWS Service (ANS) is looking for volunteers to contribute weekly OSCAR status reports. If you have a favorite OSCAR which you work on a regular basis and would like to contribute to this bulletin, please send your observations to WD0HHU at his CompuServe address of 70524,2272, on INTERNET at wd0hhu@amsat.org, or to his local packet BBS in the Denver, CO area, WD0HHU @ W0LJF.#NECO.CO.USA.NOAM. Also, if you find that the current set of orbital elements are not generating the correct AOS/LOS times at your QTH, PLEASE INCLUDE THAT INFORMATION AS WELL. The information you provide will be of value to all OSCAR enthusiasts.

/EX

Date: Fri, 10 Dec 1993 22:17:03 MST
From: library.ucla.edu!europa.eng.gtefsd.com!avdms8.msfc.nasa.gov!
sol.ctr.columbia.edu!destroyer!nntp.cs.ubc.ca!alberta!nebulus!ve6mgs!
usenet@network.ucsd.edu
Subject: Daily Summary of Solar Geophysical Activity for 10 December
To: info-hams@ucsd.edu

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

10 DECEMBER, 1993

/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 10 DECEMBER, 1993

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 344, 12/10/93
10.7 FLUX=096.1 90-AVG=097 SSN=060 BKI=1213 2201 BAI=005
BGND-XRAY=B1.4 FLU1=1.8E+05 FLU10=1.1E+04 PKI=2223 3221 PAI=007
BOU-DEV=005,014,008,029,011,012,001,005 DEV-AVG=010 NT SWF=00:000
XRAY-MAX= B2.8 @ 0445UT XRAY-MIN= B1.3 @ 2256UT XRAY-AVG= B1.6
NEUTN-MAX= +002% @ 2345UT NEUTN-MIN= -003% @ 0140UT NEUTN-AVG= -0.0%
PCA-MAX= +0.0DB @ 2355UT PCA-MIN= -0.3DB @ 1405UT PCA-AVG= -0.0DB
BOUTF-MAX=55353NT @ 0542UT BOUTF-MIN=55333NT @ 1916UT BOUTF-AVG=55348NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+064,+000,+000
GOES6-MAX=P:+116NT@ 1810UT GOES6-MIN=N:-069NT@ 0856UT G6-AVG=+086,+025,-041
FLUXFCST=STD:095,095,095;SESC:095,095,095 BAI/PAI-FCST=010,010,010/015,015,010
KFCST=1223 4322 1223 4322 27DAY-AP=008,011 27DAY-KP=2132 3221 1223 3423
WARNINGS=
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 09 DEC 93 was 40.0.
The Full Kp Indices for 09 DEC 93 are: 2o 2- 1+ 2- 2+ 2- 1o 2-

SYNOPSIS OF ACTIVITY

Solar activity was very low. No flares were reported.
Three regions were numbered: 7631 (N13W33), 7632 (N06E58), and
7633 (S18W47). Region 7631 has since lost its spot.

Solar activity forecast: solar activity is expected to be
very low.

The geomagnetic field was quiet to mildly unsettled.

Geophysical activity forecast: the geomagnetic field is
expected to be unsettled throughout the period.

Event probabilities 11 dec-13 dec

Class M	01/01/01
Class X	01/01/01
Proton	01/01/01
PCAF	Green

Geomagnetic activity probabilities 11 dec-13 dec

A. Middle Latitudes	
Active	15/15/15
Minor Storm	05/05/05
Major-Severe Storm	01/01/01
B. High Latitudes	
Active	15/20/20
Minor Storm	10/10/10
Major-Severe Storm	01/01/01

HF propagation conditions were near-normal over the low and middle latitude paths. High and polar latitude paths saw near-normal propagation intermixed with occasional isolated minor signal degradation, mostly during the local night sectors and on paths transiting the sunrise sector. These conditions will likely persist over the next several days. Near-normal propagation should continue over the middle and lower latitude paths. MUFs have been and likely will remain depressed by up to approximately 20 to 30 percent.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS

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REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 10/2400Z DECEMBER

NMBR	LOCATION	LO	AREA	Z	LL	NN	MAG	TYPE
7629	S21W40	083	0080	DAO	08	012	BETA	
7630	S09W42	085	0050	CAO	07	006	BETA	
7632	N06E58	345	0020	HRX	01	001	ALPHA	
7633	S18W47	090	0000	AXX	00	001	ALPHA	
7627	S15W64	108					PLAGE	
7631	N13W33	076					PLAGE	

REGIONS DUE TO RETURN 11 DECEMBER TO 13 DECEMBER

NMBR	LAT	LO
NONE		

LISTING OF SOLAR ENERGETIC EVENTS FOR 10 DECEMBER, 1993

 BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP SWF
 NO EVENTS OBSERVED

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 10 DECEMBER, 1993

 ISOLATED HOLES AND POLAR EXTENSIONS
 EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
 53 S38E66 S38E66 S12E14 S10E20 011 ISO NEG 010 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date	Begin	Max	End	Xray	Op	Region	Locn	2695 MHz	8800 MHz	15.4 GHz
09 Dec:	0111	0114	0116	B4.2						
	0206	0214	0220	B4.9						
	0318	0322	0326	B4.1	SF	7629	S22W15			
	0420	0424	0426	B3.1						

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

	C	M	X	S	1	2	3	4	Total	(%)
Region 7629:	0	0	0	1	0	0	0	0	001	(25.0)
Uncorrelated:	0	0	0	0	0	0	0	0	003	(75.0)

Total Events: 004 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date	Begin	Max	End	Xray	Op	Region	Locn	Sweeps/Optical Observations
NO EVENTS OBSERVED.								

NOTES:

All times are in Universal Time (UT). Characters preceding begin, max, and end times are defined as: B = Before, U = Uncertain, A = After. All times associated with x-ray flares (ex. flares which produce associated x-ray bursts) refer to the begin, max, and end times of the x-rays. Flares which are not associated with x-ray signatures use the

GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+063,+000,+000
GOES6-MAX=P:+114NT@ 1609UT GOES6-MIN=N:-072NT@ 1004UT G6-AVG=+085,+022,-035
FLUXFCST=STD:090,090,090;SESC:090,090,090 BAI/PAI-FCST=010,010,010/015,010,010
KFCST=1223 3221 1223 3221 27DAY-AP=011,009 27DAY-KP=1223 3423 3322 2123
WARNINGS=
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 10 DEC 93 was 49.5.
The Full Kp Indices for 10 DEC 93 are: 2- 2+ 2- 3- 3- 2o 2- 1o

SYNOPSIS OF ACTIVITY

Solar activity was very low. All regions on the disk were quiet and stable.

Solar activity forecast: solar activity is expected to be very low to low.

The geomagnetic field was predominantly quiet to unsettled. Some brief isolated active periods occurred at high latitudes from 0600-1200UT.

Geophysical activity forecast: the geomagnetic field is expected to be generally unsettled for the next three days.

Event probabilities 12 dec-14 dec

Class M	01/01/01
Class X	01/01/01
Proton	01/01/01
PCAF	Green

Geomagnetic activity probabilities 12 dec-14 dec

A. Middle Latitudes	
Active	15/15/15
Minor Storm	05/05/05
Major-Severe Storm	01/01/01
B. High Latitudes	
Active	15/15/15
Minor Storm	05/05/05
Major-Severe Storm	01/01/01

HF propagation conditions were normal over the low and

middle latitude regions. However, conditions over the high and polar latitude regions continued to be below-normal with relatively poor propagation. Poor propagation has been confined mostly to the night and sunrise sectors. Although conditions may improve somewhat over the next several days, provided geomagnetic activity remains quiet, propagation will likely be slow to recover due to the weak state of the ionosphere.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS

REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 11/2400Z DECEMBER

NMBR	LOCATION	LO	AREA	Z	LL	NN	MAG	TYPE
7629	S21W54	084	0100	CA0	10	012	BETA	
7630	S10W57	087	0050	CS0	08	005	BETA	
7632	N05E44	346	0000	AXX	01	001	ALPHA	
7633	S18W60	090	0000	AXX	01	001	ALPHA	
7627	S15W77	107					PLAGE	
7631	N13W46	076					PLAGE	

REGIONS DUE TO RETURN 12 DECEMBER TO 14 DECEMBER

NMBR	LAT	LO
7620	N03	268

LISTING OF SOLAR ENERGETIC EVENTS FOR 11 DECEMBER, 1993

BEGIN	MAX	END	RGN	LOC	XRAY	OP	245MHZ	10CM	SWEEP	SWF
NO EVENTS OBSERVED										

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 11 DECEMBER, 1993

ISOLATED HOLES AND POLAR EXTENSIONS

EAST	SOUTH	WEST	NORTH	CAR	TYPE	POL	AREA	OBSN
NO DATA AVAILABLE FOR ANALYSIS								

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date	Begin	Max	End	Xray	Op	Region	Locn	2695 MHz	8800 MHz	15.4 GHz
10 Dec:	2258	2305	2310	B2.5						

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

	C	M	X	S	1	2	3	4	Total	(%)
	--	--	--	--	--	--	--	--	---	-----
Uncorrelated:	0	0	0	0	0	0	0	0	001	(100.0)

Total Events: 001 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date	Begin	Max	End	Xray	Op	Region	Locn	Sweeps/Optical	Observations
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
NO EVENTS OBSERVED.									

NOTES:

All times are in Universal Time (UT). Characters preceding begin, max, and end times are defined as: B = Before, U = Uncertain, A = After. All times associated with x-ray flares (ex. flares which produce associated x-ray bursts) refer to the begin, max, and end times of the x-rays. Flares which are not associated with x-ray signatures use the optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II	= Type II Sweep Frequency Event
III	= Type III Sweep
IV	= Type IV Sweep
V	= Type V Sweep
Continuum	= Continuum Radio Event
Loop	= Loop Prominence System,
Spray	= Limb Spray,
Surge	= Bright Limb Surge,
EPL	= Eruptive Prominence on the Limb.

** End of Daily Report **

Date: 13 Dec 93 16:22:42 GMT
 From: news-mail-gateway@ucsd.edu
 Subject: Pie-on-face re: Hypocondriac
 To: info-hams@ucsd.edu

ebs@crystal.cirrus.com Mon Dec 13 10:41:47 1993 rightly complains about my

math...

I said

>>4b) To obtain the power density at any distance, merely divide the isotropic-radiator ERP by the surface area of a sphere of the desired radius. This is because an isotropic radiator equally illuminates every part of the sphere.

He said

>The original distance given was 100ft or ~30m.

I said

>> Area of sphere of radius 300 m = $4 \pi (300)^2 = 1\,130\,940 \text{ m}^2$

>> Main-lobe power density at 300 m distance = $3.2 \times 10^3 / 1.1 \times 10^6 =$

>> $= 2.9 \text{ W/m}^2 \ll \text{should be mW/m}^2$

>> $= 0.29 \text{ mW/cm}^2 \ll \text{uW/cm}^2$

He said

>Using your 300m number this should be 2.8 mW/m^2 , or $.28 \text{ uW/cm}^2$. This is a very small

>number, but it is consistent with your 300m distance instead of the 30m. If you use

>the 30m number, you will get 28.3 uW/cm^2 which is right in there with the latest numbers we have all been calculating.

I said

>>Wasn't this simple? Wasn't this correct?

He said

>Well, close. :-)

Criticism accepted.....

Bob W3OTC

Date: Fri, 10 Dec 1993 08:29:55 -0500

From: ucsnews!sol.ctr.columbia.edu!howland.reston.ans.net!usenet.ins.cwru.edu!news.yasu.edu!psuvm!cunyvm!rohvm1!rohvm1.mah48d@network.ucsd.edu

Subject: Scratchi, January, 1960

To: info-hams@ucsd.edu

1. Political rectitude sucks! It has deprived us of access to some of our history and classics, merely because it might "offend" someone. How can you understand yourself if you cannot access the information on your background. Case in point, I cannot see Disney ever re-releasing Song of the South, which was a delightful movie, because it is a stereotype.

2. I read a couple of issues of CQ back in the late '50's, and found it puerile then (the Scratchi articles definitely contributed to the impression), and I was only a teenager at the time. The posting was interesting nostalgia, but the literary quality was...

3. Isn't this an amateur radio group?? CQ real ham stuff!

73 all, de John, W3ZID

Date: 13 Dec 93 13:55:22 GMT
From: ogicse!emory!kd4nc!ke4zv!gary@network.ucsd.edu
To: info-hams@ucsd.edu

References <thweatt.755217435@mustang18>, <1993Dec8.123356.6473@ke4zv.atl.ga.us>, <2eagk2\$n11@wuecl.wustl.edu>
Reply-To : gary@ke4zv.atl.ga.us (Gary Coffman)
Subject : Re: ARRL BOOK???WHERE???

In article <2eagk2\$n11@wuecl.wustl.edu> jlw3@cec2.wustl.edu (Jesse L Wei) writes:
>Gary Coffman (gary@ke4zv.atl.ga.us) wrote:

>: that. First and foremost they have to dumb it down to the reading level
>: of current amateurs. It's currently at about an eighth grade reading
>: level. And second, the simple CW transmitter construction projects included
>

>Wait--I don't find the handbook (1991 ed) particularly easy reading--I'm
>definitely not at the eight grade level. OK, maybe just college, but
>even so, that handbook isn't really that simple to read if you aren't
>so experienced as to be an engineer or for that matter, an Advanced--
>Granted, things like electrical theory are um. . .abbreviated, but I think
>they are for people like me, who only have limited experience in
>electrical networks.

The concepts aren't easier. In fact they receive less in depth treatment now than they did in earlier works, so they are actually harder to understand. What I'm talking about is prose style. This isn't confined to the Handbook of course, US Army tech manuals have also had to be rewritten at a lower reading comprehension level. This means smaller words, shorter sentences, etc. It's not quite at the "See Spot run." level yet, but that's the direction.

>: One of the better years for the Handbook is 1962. That's the edition to
>: which I refer most often. It uses bigger words and more complex sentence
>: structure, but it should be accessible to someone who was a tenth grader
>: in 1962, or to current college graduates. It includes more ambitious
>

>Are these current college graduates assumed to have graduated in a technical
>field. i.e. What if the graduate is a graduate in the humanities or
>natural sciences??????

The assumption is that they have a grasp of the English language. Even college graduates today often have smaller vocabularies, and grasp of sentence structure and internal logic, than 8th graders of 20 years ago. This in turn leads to lower comprehension levels which then requires much

more verbose text to get across the same point that would have been grasped easily a couple of decades ago.

>IMHO that 2.25 inch thick manual is plenty to start with.

Oh, don't get me wrong, there's still a wealth of information in the Handbook. I just find it a less usable reference than in earlier years. As an example of what I consider a good handbook, I'd recommend the Bosch Automotive Handbook. It's clear, concise, and complete in a 2.54 cm thick pocket book. The important concepts, data, and formulae needed for effective automotive design are all in there. And they are easily accessed thanks to excellent organization, indexing, and layout. A radio handbook as well written and edited need be no larger.

With our current Handbook, I find myself having to apply random searches to access particular information, and then having to slog through too much verbage to get to the point. And despite all that verbage, fundamental questions go begging. For example, nowhere in the current Handbook will you find a coherent explanation of **why** an antenna radiates, though there's a chapter on antennas. I'd say that's pretty fundamental to amateur radio wouldn't you? Maxwell deserves better, and so do we.

Gary

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Gary Coffman KE4ZV	I kill you,	gatech!wa4mei!ke4zv!gary
Destructive Testing Systems	You kill me,	uunet!rsiatl!ke4zv!gary
534 Shannon Way	We're the Manson Family	emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244	-sorry Barney	

End of Info-Hams Digest V93 #1459

